OIPE JC48
JAN 04 2005
PATENT & TRADEMARK OFFICE

AF/IFW

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application No.	09/473,598
Filing Date	December 29, 1999
First Named Inventor	Raymond C. Edmonds
Art Unit	2674
Examiner Name	Abdulselam, Abbas I.
Attorney Docket Number	42390P7353
Total Number of Pages in This Submission	32

ENCLOSURES *(check all that apply)*

☒ Fee Transmittal Form
  ☒ Fee Attached
☐ Amendment / Response
  ☐ After Final
  ☐ Affidavits/declaration(s)
☐ Extension of Time Request
☐ Express Abandonment Request
☐ Information Disclosure Statement
  ☐ PTO/SB/08
☐ Certified Copy of Priority Document(s)
☐ Response to Missing Parts/ Incomplete Application
  ☐ Basic Filing Fee
  ☐ Declaration/POA
  ☐ Response to Missing Parts under 37 CFR 1.52 or 1.53

☐ Drawing(s)
☐ Licensing-related Papers
☐ Petition
☐ Petition to Convert a Provisional Application
☐ Power of Attorney, Revocation Change of Correspondence Address
☐ Terminal Disclaimer
☐ Request for Refund
☐ CD, Number of CD(s)

☐ After Allowance Communication to Group
☐ Appeal Communication to Board of Appeals and Interferences
☒ Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
☐ Proprietary Information
☐ Status Letter
☒ Other Enclosure(s) *(please identify below)*:

Return receipt postcard

Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Joseph Lutz, Reg. No. 43,765 BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
Signature	
Date	12/29/04

CERTIFICATE OF MAILING/TRANSMISSION

I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop Appeal Brief-Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Typed or printed name	Linda Black		
Signature		Date	12/29/04

Based on PTO/SB/21 (04-04) as modified by Blakely, Sokoloff, Taylor & Zafman (wlr) 06/04/2004.
SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

FEE TRANSMITTAL for FY 2005

Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27.

TOTAL AMOUNT OF PAYMENT	($)	500.00

Complete if Known	
Application Number	09/473,598
Filing Date	December 29, 1999
First Named Inventor	Raymond C. Edmonds
Examiner Name	Abdulselam, Abbas I.
Art Unit	2674
Attorney Docket No.	42390P7353

METHOD OF PAYMENT *(check all that apply)*

☒ Check ☐ Credit card ☐ Money Order ☐ None ☐ Other (please identify): ______

☒ Deposit Account Deposit Account Number: 02-2666 Deposit Account Name: Blakely, Sokoloff, Taylor & Zafman LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☐ Charge fee(s) indicated below

☐ Charge fee(s) indicated below, except for the filing fee

☒ Charge any additional fee(s) or underpayment of fee(s) under 37 CFR §§ 1.16, 1.17, 1.18 and 1.20.

☒ Credit any overpayments

FEE CALCULATION

1. EXTRA CLAIM FEES

				Extra Claims		Fee from below		Fee Paid
Total Claims	35	-	35** =	0	X	50.00	=	$0.00
Independent Claims	4	-	4** =	0	X	200.00	=	$0.00
Multiple Dependent							=	

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description
1202	50	2202	25	Claims in excess of 20
1201	200	2201	100	Independent claims in excess of 3
1203	360	2203	180	Multiple Dependent claim, if not paid
1204	300	2204	150	**Reissue independent claims over original patent
1205	300	2205	150	**Reissue claims in excess of 20 and over original patent

**or number previously paid, if greater, For Reissues, see below.

SUBTOTAL (1) ($) 0.00

2. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	
2053	130	2053	130	Non-English specification	
1251	120	2251	60	Extension for reply within first month	
1252	450	2252	225	Extension for reply within second month	
1253	1,020	2253	510	Extension for reply within third month	
1254	1,590	2254	795	Extension for reply within fourth month	
1255	2,160	2255	1,080	Extension for reply within fifth month	
1401	500	2401	250	Notice of Appeal	
1402	500	2402	250	Filing a brief in support of an appeal	500.00
1403	1,000	2403	500	Request for oral hearing	
1451	1,510	2451	1,510	Petition to institute a public use proceeding	
1460	130	2460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
1809	790	1809	395	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	790	2810	395	For each additional invention to be examined (37 CFR § 1.129(b))	
Other fee (specify)				______	

SUBTOTAL (2) ($) 500.00

SUBMITTED BY

Complete (if applicable)

Name (Print/Type)	Joseph Lutz	*Registration No. (Attorney/Agent)*	43,765	*Telephone*	(310) 207-3800
Signature				*Date*	12/29/04

Based on PTO/SB/17 (12-04) as modified by Blakely, Sokoloff, Taylor & Zafman (wlr) 12/15/2004.
SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

OIPE JC48
JAN 0 4 2005
PATENT & TRADEMARK OFFICE

Our Ref. No.: 42390P7353

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:	
Raymond C. Edmonds	Examiner: Abdulselam, Abbas
Application No.: 09/473,598	Art Unit: 2674
Filed: December 29, 1999	Confirmation No.: 1187
For: INTELLIGENT DISPLAY INTERFACE	

APPEAL BRIEF

Mail Stop Appeal Brief - Patent
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Applicant submits the following Appeal Brief pursuant to 37 C.F.R. §41.37(c) for consideration by the Board of Patent Appeals and Interferences. Applicant also submits herewith a check in the amount of $500.00 to cover the cost of filing the opening brief as required by 37 C.F.R. §1.17(f). Please charge any additional amount due or credit any overpayment to Deposit Account No. 02-2666.

01/05/2005 HVUONG1 00000004 09473598
01 FC:1402 500.00 OP

TABLE OF CONTENTS

Page

VII. ARGUMENT

I. REAL PARTY IN INTEREST

Raymond C. Edmonds, the party named in the caption, transferred his rights to that which is disclosed in the subject application through an assignment recorded on December 29, 1999 (010489/0532) in the patent application to Intel Corporation, of Santa Clara, California. Thus, as the owner at the time the brief is being filed, Intel Corporation, of Santa Clara, California is the real party in interest.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences which will affect or be affected by the outcome of this appeal.

III. STATUS OF CLAIMS

Claims 1-3, 5, 10-13, 15-22, 24 and 26-29 are pending and rejected in this application. Applicant hereby appeals the rejection of all pending claims.

IV. STATUS OF AMENDMENTS

The claims are amended in accordance with the Response Amendment filed on April 19, 2004, wherein Claims 1-3, 5, 22, 24 and 26 were amended and Claims 28-43 were added. The claim amendments requested in the Response Amendment filed on April 19, 2004 was entered.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The pending claims relate to an intelligent display interface. Independent Claim 1 recites the method that includes the identification by a video controller 22 of an updated portion of first image data that has changed since the previous transmission to a first display device 26, as shown in FIG. 1. The first updated portion is transmitted to the first display device 26 from video controller 22. The video controller also identifies a second updated portion of second video image data that has changed since the previous transmission to a second display device 28 and transmits the second updated portion of second video image data from the video controller 22 to the second display device 28. (*See*, Applicant's Specification, pg. 4, lines 17-21.)

In the embodiment described at pg. 9, final paragraph, the first displayed image in the first display device 26 is refreshed from a first video memory 27 of the first display device 26, as recited by dependent Claim 2. As further described at pg. 4, lines 2-4 of Applicant's Specification, the first and second portions, which are transmitted over the shared communications channel, are formatted differently, as recited by dependent Claim 10.

As recited by dependent Claim 12, the first and second portions may include addresses to identify the first video device and the second video device. (*See*, Applicant's Specification, pg. 5, lines 11-20.)

Independent Claim 22 recites a system 21, which includes a shared communications channel 24, a first display device 26 and a second display device 28 coupled to the shared communications channel, as shown in FIG. 1. As illustrated, the first display device 26 and the second display device 28 include a first video memory 27 and a second video memory 29, respectively. (*See*, Applicant's Specification, pg. 3, final paragraph.)

As shown in FIG. 1 of Applicant's Specification, a video controller 22 coupled to the shared communications channel 24 transmits an identified first updated portion of first video image data that has changed since a previous transmission to the first display device 26 over the shared communications channel 24 to the first display device 26. As further shown, the video controller 22 transmits an identified second updated portion of second video data that has changed since a previous transmission to the second display device 28 over the shared communications channel 24 to the second display device 28. (*See*, Applicant's Specification, pg. 4, lines 17-21.)

As illustrated in FIG. 3 of Applicant's Specification, the first display device 26 includes a first address decoder 32 to decode a first device address associated with the first updated portion of first video image data received over the shared communications channel 24. As further shown, the second display device 28 includes a second address decoder 32 to decode a second device address associated with the second updated portion of second video image data received over the shared communications channel 24. (*See*, Applicant's Specification, pg. 6, lines 5–10.)

As further recited by dependent Claim 30, the first display device 26 may include an interface 23 coupled to the shared communications channel 24 and a video memory 27 coupled to the interface 23. (*See*, Applicant's Specification, pg. 4, lines 1-4.) As illustrated with reference to FIG. 3 of Applicant's Specification, if an address associated with an updated portion of video image data received over the shared communications channel 24 matches an address of the first display device 26, interface 23 updates video memory 27 with the updated portion of video image data. As further shown with reference to FIG. 3, a control circuit 30 refreshes a displayed image in the first display 26 from the first video memory 27. Analogous features are also recited by dependent Claim 32.

Independent Claim 34 recites a method including detection by display device (26, 28) of an updated portion of video image data received over a shared communications channel 24. As further described, a video memory of the display device (26, 28) is updated if an address associated with the updated portion of video image data matches a display device address. Once the video memory is updated, a displayed image in the display device (26, 28) is refreshed from the video memory (27, 29). (*See*, Applicant's Specification, FIG. 4 and pg. 9, lines 14-22.)

Independent Claim 39 recites a display device (26, 28), which includes a video memory (27, 29) and an interface (23, 25) coupled to the video memory (27, 29). (*See*, Applicant's Specification, pg. 4, lines 1-4 and lines 17-21.) As described, the interface (23, 25) detects an updated portion of video image data received over shared communications channel and updates the video memory (27, 29) if an address associated with the updated portion of video image data matches a display device address. As further shown with reference to FIG. 3, a control circuit 30 refreshes a display image in the displayed device (26, 28) from the video memory (27, 29). (*See*, Applicant's Specification, pg. 6, lines 5-16.)

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection involved in this appeal are as follows:

Are Claims 1-3, 5, 10-13, 15-22, 24 and 26-29 unpatentable under 35 U.S.C. §103(a) as being unpatentable over Salesky et al., U.S. Patent No. 6,343,311 ("Salesky") and Teng et al., U.S. Patent No. 5,903,473 ("Teng")?

Are Claims 2 and 18-19 unpatentable under 35 U.S.C. §103(a) as being unpatentable over Salesky and Teng and Ohshima, U.S. Patent No. 5,977,945 ("Ohshima")?

Are Claims 30-33 unpatentable under 35 U.S.C. §103(a) as being unpatentable over Salesky and Teng and Begun et al., U.S. Patent No. 5,459,842 ("Begun")?

Are Claims 34 and 39 unpatentable under 35 U.S.C. §103(a) as being unpatentable over Salesky, Teng and Begun?

Are Claims 36 and 40 unpatentable under 35 U.S.C. §103(a) as being unpatentable over Ohshima, Teng, Begun and Salesky?

VII. ARGUMENT

A. Overview of the Cited References

1. Overview of Salesky Reference

Salesky teaches networked computer communication systems which handle arbitrary streams of data and transport at various speeds those streams where immediate updates can be dropped if they are obsoleted by later arriving data updates, optimizing the utilization of network and node resources. See Salesky, Abstract. In a conference setting, an image is sent through a server from a presenter to attendees of the conference. The image can be updated by the server or sent at fixed or variable times announced by the presenter. See Salesky, col. 12, lines 17-22. The image is updated by comparing a block portion of a total image and, if that block portion is different, changing the block portion by updating the image and sending the changes to a server which transmits the changes to the devices connected to the server. See Salesky, col. 12, lines 29–44.

Therefore, Salesky only teaches an image being updated by sending changes to a server and the server transmitting the changes to the devices connected to the server. In other words, Salesky teaches the same updated image data being sent to multiple computers from a server. The point of conferencing is to update each of the attendees with the same information and Salesky does this by a server sending each participant the same updated data. However, Salesky does not teach or suggest display devices receiving updated data portions different from one another over the same communications channel.

Hence, Salesky describes a presenter client computer 12 that identifies data that has been updated within an image and limits transmission of data to updates of the image. As described in col. 12, lines 17-67 of Salesky, Salesky teaches the detection of updated image data by comparison to a stored image. As illustrated in FIG. 1 of Salesky, presenter client computer 12 transmits the updated image data to conference server 14. Conference server 14 is responsible for transmitting data to the attendee client computers 18A-18C, which display an updated image. (*See* col. 12, lines 63-67.)

Conference server 14, as taught by Salesky, does not detect the updated portion of video image data, but merely forwards the updated portion of video image data received from presenter client computer 12. Hence, although Salesky teaches the detection of updated image data by presenter client computer 12, conference server 14 is responsible for transmitting data to the attendee client computers 18A-18C, which display an updated image. (*See* col. 12, lines 63-67.)

Accordingly, as described above, Salesky describes a computer conferencing system in which:

> Conference participants are either "presenters who can modify the display" or "attendees who cannot modify the display." A pointer icon, which can be labeled to identify the conferee, is displayed on the shared image area. Each conferee can modify the position of his or her own pointer, even when not presenting, so that every participant can see what the conferee is pointing to, should a conferee choose to point to an element of the display. (*See*, Salesky Abstract.)

Based on the cited passage above, Applicant respectfully submits that presenters and attendees are displayed the exact information on the shared image area, such that even when a conferee chooses to move his pointer, such movement is illustrated to the various conferees or presenters based on the cited passage above.

Furthermore:

> An attendee can become presenter by sending the appropriate attendee-to-presenter command to conference server 14. In the simplest embodiment with a single presenter, a message is sent to the presenter's screen indicating that an attendee wishes to take the presenting role; if the current presenter approves, then the roles are exchanged. In more complex embodiments, there can be a presenter arbitration mechanism, or multiple presenters may be allowed. (col. 8, lines 55-63.)

2. Overview of Teng Reference

Teng describes:

> A video controller for controlling distribution of live full motion video streams between clients attached to one or more communication networks, and for integrating live motion video distribution with other functions, such as recording and playback of video streams. (col. 1, lines 19-28.)

As further described by Teng:

> The present invention provides for server-mediated broadcast, multicast and unicast of multiple simultaneous live or previously stored full motion video streams in a network. The present invention may be utilized in a communication network in which source clients and viewer clients are connected to one or more network segments of a local area or wide area network. A video server connected to one of the network segments controls the transmission of a live video stream from one of the source clients connected to a given network segment to one or more viewer clients connected to the same or another network segment . . . The server thus mediates transmission of video streams within a given network segment or across different network segments. (col. 3, lines 48-58.)

As illustrated with reference to FIG. 1 of Teng:

> The server 12 communicates with other LAN segments 31, 40 of network 10 via a hub switch. The server 12 mediates broadcast, multicast and unicast of live and stored full motion video over the various LAN segments 13, 31 and 40 in accordance with the invention . . . The server 12 can record and playback full motion video by accessing suitable storage devices. The server can also mediate video transmission via satellite using suitable arranged transceivers. (col. 5, lines 36-54.)

As further described by Teng:

> Server 12 thus mediates numerous functions involving distribution of both live and stored video through LAN segment 13. . . . The server also mediates distribution of LAN and produces stored video to and from other networks and network segments in the exemplary communication network 10. (col. 6, lines 34–40.)

As further described with reference to FIG. 6 of Teng:.

> The presenter client 210 supplies a video stream and an audio stream to the network 220 for distribution to each of the viewer clients 215-I as shown. In addition, each viewer client 215-I is operative to supply an audio stream via a return channel 222-I to the network 220. In alternative embodiments, each viewer client could supply a return channel video stream in addition to or in place of the return channel audio stream . . . Using system 200, a live video presentation can be provided from a presenter desktop PC to the desktop PC of each member of the audience. The system 200 also permits one or more viewers to raise and/or answer questions, make comments, or otherwise participate in the presentation from a viewer desktop PC via the audio return channels. (col. 11, lines 37-55.)

3. Overview of Ohshima Reference

Ohshima is directed to preventing the dispersion of an object on a screen when multi-interlacing is applied. As described within Ohshima:

> If a display is performed by the use of the multi-interlacing, the object which is reproduced on a screen (for example, cursor, character, icon, other graphics, or the like) is accompanied by so-called "barake" or dispersion when it is shifted or nearly reproduced; hence spoiling the quality of the display significantly. (col. 1, lines 31-36.) (Emphasis added.)

As further described within Ohshima:

> A partial rewriting method is provided, such that in shifting an object on a screen or reproducing it thereon, only the line where the screen representation changes is temporarily displayed by non-interlacing method. (col. 1, lines 44–47.). (Emphasis added.)

Accordingly, Ohshima describes an object of the invention to provide specific means or structure to implement the foregoing partial writing method. As described within Ohshima:

> Display driver means 12 updates the image data in the frame buffer as requested by the application software 11 and at the same time transfers the information regarding updated line to partially rewritten line determination means 16. The partially rewritten line determination means 16 determines the line for which partial rewriting must be executed on the basis of information transferred from the display driver means, and then deliver the information to scan line control means. (col. 2, lines 35-43.) (Emphasis added.)

Referring to Figure 2 of Ohshima, Figure 2 shows graphic controller (27) connected to frame buffer (13), local memory (28) and FLC display (15). Graphic controller (27) may send and receive data to and from frame buffer (13) and/or local memory (28), however frame buffer (13) and local memory (28) are not video memories of FLC display (15) since Figure 2 shows frame buffer (13) and local memory (28) as separate and distinct from FLC display (15). Moreover, Figure 2 shows the data sent from graphic controller (27) goes directly to FLC display (15), not to a video memory of FLC display (15). Applicant respectfully submits the data sent to FLC display (15) is simply displayed and cannot be sent to any memory since there is no teaching or suggestion that FLC display (15) contains any memory. Therefore, Figure 2 of Ohshima fails to teach or suggest transmitting a first portion of video image data over a bus to a first video memory contained within a first display device since FLC display (15) does not include a first video memory.

Furthermore, Ohshima requires:

> The variable scan position raster scan display means 14 transfer the data in the frame buffer corresponding to the lines specified by the scan line control means to an FLC display 15 for display. (col. 2, lines 46-49.)

As illustrated by FIGS. 2-4 of Ohshima, the functionality described occurs within a computer architecture and therefore provides no teachings or suggestions with regards to the receipt of updated image data from a shared communications channel. In other words, the teachings of Ohshima are strictly limited to a computer architecture within a computer and therefore have no application with regards to a plurality of networked computers. Hence, the problem of preventing dispersion of an object on a screen when multi-interlacing is applied is generally not a problem that is encountered by network devices, but it is, in fact, a problem that is limited to a specific computer.

4. Overview of Begun Reference

Begun describes a system for combining multiple CPU write requests via buffers and using a read/write/modify operation to write the combined data to the memory. Hence, Begun teaches a write compression buffer connected to a CPU and memory controller to provide write cycle compression in which plural partial write requests to the same memory address are compressed into a single memory write cycle. (*See*, Abstract.) As further described by Begun:

> The invention takes advantage of the tendency of personal computer microprocessors, as viewed on the CPU local bus, to issue a large number of sequential write cycles to memory addresses that are closely associated. (col. 2, lines 53-56.)

As further described, in accordance with the invention:

> The execution of partial write cycles can be speeded up by compressing two consecutive write cycles to do different subunits of any given atomic memory unit into a single write cycle to that single atomic memory address. Any two such microprocessor addresses, as seen on the CPU local bus, that result in a single read/write/modify or a single write access as seen at the DRAM are said to be compressed. (col. 3, lines 9-16.)

Accordingly, based on the cited passages above, Applicant respectfully submits that the teachings of Begun are strictly limited to dealing with the processor-to-memory bottleneck that introduces significant latency within personal computer systems. Hence, the write combining, as taught by Begun, is strictly limited to reducing the number of partial write requests to the same memory address.

B. Rejection of Claims 1-3, 5, 10-13, 15-22, 24 and 26-29 As Obvious over Salesky and Teng

1. Errors of Law and Fact in the Rejection

For the reasons provided below, the Examiner has failed to establish a *prima facie* case of obviousness in view of the references of record. The Federal Circuit Court of Appeals in In re Rijckaert, 9 F.3d 1531, 28 U.S.P.Q. 2d 1955 (Fed. Cir. 1993) held that:

> In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a *prima facie* case of obviousness. . . . "A *prima facie* case of obviousness is established when the teaching from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art.". . . If the examiner fails to establish a *prima facie* case, the rejection is improper and will be overturned. (Emphasis added.) 9 F.3d at 1532, 28 U.S.P.Q. 2d at 1956.

Applicants respectfully submit that the combined teachings of Salesky in view of Teng would not have suggested the claimed invention to one of ordinary skill in the art, as required to establish a *prima facie* case of obviousness. Id. Hence, a *prima facie* case of obviousness has not been established and the rejection is erroneous and should be overturned.

As correctly pointed out by the Examiner:

> Salesky does not disclose "transmitting of identified updated image data from a video controller to a display". Salesky also does not teach the first updated portion and the second updated portion being transmitted over a shared communication channel coupled between the video controller, the first display device and the second display device." (*See*, pg. 3, ¶2 of the Final Office Action mailed July 19, 2004.)

As a result, the Examiner cites Teng. According to the Examiner:

> ... it would have been obvious to one having skill in the art at the time the invention was made to modify Salesky's client-server system (Fig. 1) to adapt Teng's use of video server (12) along with the shared transmission medium (13) as illustrated in Fig. 1. (*See*, pg. 3, ¶2 of the Final Office Action mailed July 19, 2004.)

Applicant respectfully submits that the modification of Salesky in view of Teng, as proposed by the Examiner, would render Salesky unsatisfactory for its intended purpose. As indicated by the Federal Circuit:

> If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. In re Gordon, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984).

Here the shared transmission medium (13) taught by Teng is a local area network (LAN.) (*See* Teng, FIG 1.) Applicants respectfully submit that LANs are generally known to those skilled in the art to describe computer networks that span a relatively small area. (*See*, Exhibit 1, which provides a Webopedia Definition of LAN.)

Applicant respectfully submits that the Examiner's proposed modification of Salesky's client server system (FIG. 1) to adapt Teng's use of video server 12 along with shared transmission medium 13, would require attendee client computers shown in FIG. 1 of Teng to be attached by the same LAN 13 to conference server 14. Applicant respectfully submit that one skilled in the art would not make the Examiner's proposed modification since computer conferencing systems are generally designed to connect conference attendees that are geographically remote from one another. Requiring conference attendees to be connected by the same LAN prohibits the purpose of the computer conferencing system taught by Salesky:

> [t]he desktop conferencing system is used to display a shared collaboration among conference participants ("conferees"), with one or more individuals located at each remote site connected to the conference. (Col. 1, lines 52-55.) (emphasis added)

Hence Applicant respectfully submits that the Examiner's proposed modification of Salesky's client server system (FIG. 1) to adapt Teng's use of video server 12 along with shared transmission medium 13, as illustrated in FIG. 1, would render the computer conferencing system taught by Salesky unsatisfactory for its intended purpose of facilitating conferencing between geographically remote individuals. (*See*, Col. 1, lines 52-55.)

In fact, Applicant respectfully submits that Salesky teaches away from the modification proposes by the Examiner, since as described within Salesky:

> An attendee can become a presenter by sending the appropriate attendee to presenter command to conference server 14. (col. 8, lines 55-57.)

In accordance with the Examiner's reasoning, the modification of Salesky in view of Teng would require conference attendees as well as conference presenters to be connected via a LAN to the same conference server since Salesky teaches that an attendee can become a presenter. However, such a modification would obviate the need for the computer conferencing system taught by Salesky since the presenters and attendees would be required to geographically local to one another to connect to the same conference server via a LAN. Applicants respectfully submit that individuals that are geographically local to one another would simply meet in person.

Hence, Applicant respectfully submits that modifying Salesky in view of Teng would produce an unsatisfactory product, by limiting attendees and presenter(s) to the same local, geographic area. Therefore, at least for these reasons, Applicant respectfully submits that there is no motivation or suggestion to combine the teachings of Salesky in view of Teng to read on the elements of the claimed invention. Id.

Furthermore, case law has established that obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent the teaching or suggestion supporting such combination. ACS Hospital Sys., Inc. v. Montefiore Hospital, 732 F.2d. 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Moreover, one cannot find obviousness through hindsight to construct a claimed invention from elements of the prior art. In re Warner, 379 F.2d 1011, 1016, 154 U.S.P.Q. 173, 177 (C.C.P.A. 1967).

Here, the teachings of Salesky are incompatible with the teachings of Teng and thus, there is no suggestion or motivation to combine these references. The proper motivation or suggestion to combine is lacking since, the modification of Salesky in view of Teng, results in a computer conferencing system in which attendees and presenter(s) are required to occupy the same local, geographic area.

In fact, Applicants submit that modification of Salesky proposed by the Examiner runs contrary to the explicit teachings of Salesky by providing a computer conferencing system in which attendees and presenter(s) are required to occupy the same local, geographic area. One of ordinary skill in the art would not be motivated to modify Salesky in a manner specifically contrary to Salesky's own teachings.

Accordingly, Applicants' claimed invention could only be arrived at through inappropriate hindsight. Therefore, Applicant respectfully submits that the Examiner fails to establish that it would be obvious to combine the missing elements provided by Teng with the teachings of Salesky to establish a *prima facie* case of obviousness. Id.

Accordingly, Applicant respectfully submits that the combined teachings of Salesky and Teng would not have suggested the claimed invention to one of ordinary skill in the art, as required to establish a *prima facie* case of obviousness. Rijckaert, supra. Hence, a *prima facie* case of obviousness has not been established and the rejection is erroneous and should be overturned. Id.

2. Specific Limitations Not Described in the Prior Art

Independent Claims 1 and 22 recite analogous claim features. Claim 22 is representative. Independent Claim 22 recites the following claim features, which is neither taught nor suggested by Salesky, Teng or the references of record:

> a video controller coupled to the shared communication channel to transmit an identified, first updated portion of first video image data that has changed since a previous transmission to the first display device over the shared communication channel to the first display device, and to transmit an identified, second updated portion of second video image data that has changed since a previous transmission to the second display device over the shared communication channel to the second display device. (Emphasis added.)

3. Explanation Why Such Limitations Render the Claims Non-Obvious Over the Prior Art

The Examiner fails to illustrate that the combination or modification of Salesky in view of Teng teaches or suggests each of the recited features of the claimed invention. However, the case law is clear in establishing that "to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974).

Here, the claimed invention recites:

> wherein the first updated portion and the second updated portion are transmitted over a shared communication channel coupled between the video controller, the first display and the second display. (Emphasis added.)

As reflected by Applicant's use of "first video image data" and "secondvideo image data" as well as "first updated portion" and "second updated portion," claims 1 and 22 recite first and second display devices that receive updated data portions different from one another over the same communications channel. By contrast, Salesky teaches:

> a conferencing system according to the present invention facilitates the conferencing of two or more persons, each with a computer at one or more locations with a shared visual display. (col. 1, lines 11-14.) (Emphasis added.)

Applicants respectfully submit that in shared visual display conferencing systems, as taught by Salesky, the same updated image data is sent to multiple computers from a server. The point of conferencing is to update each of the attendees with the same information and Salesky does this by a server sending each participant the same updated data. Hence, Salesky does not teach or suggest display devices receiving updated data portions different from one another over the same communications channel as recited by Claims 1 and 22.

Consequently, Applicants respectfully request that the Examiner fails to establish a prima facie case of obviousness since neither the combination nor modification of Salesky in view of Teng teaches each of the recited features of Claims 1 and 22. Id.

Furthermore, Applicants respectfully submit that the Examiner fails to establish a suggestion or motivation to modify Salesky in view of Teng since such a modification would render Salesky unsatisfactory for its intended purpose of facilitating conferencing between geographically remote individuals. In fact, Salesky teaches away from the Examiners proposed modification since the modification would require presenters and attendees to occupy the same local geographic region to enable connect to the LAN, as taught by Teng. Applicants respectfully submit that individuals that are geographically local to one another would simply meet in person, thus obviating the need for the computer conferencing system taught by Salesky.

Yet, the case law clearly established that "it is improper to combine references where the references teach away from their combination. In re Grasselli, 713 F.2d 731, 743, 218 U.S.P.Q. 769, 779 (Fed. Cir. 1983). Accordingly, Applicants respectfully submit that the Examiner is prohibited from combining Salesky in view of Teng since Salesky teaches away from incorporation of the video server within present computer 12 as taught by Salesky. Id.

Accordingly, Applicant respectfully submits that the combined teachings of Salesky and Teng would not have suggested the claimed invention to one of ordinary skill in the art, as required to establish a *prima facie* case of obviousness. Rijckaert, supra. Therefore, a *prima facie* case of obviousness of the claims is not established and the rejection of Claims 1-3, 5, 10-13, 15-22, 24 and 26 should be overturned. Id.

C. Rejection of Claims 2 and 18-19 As Obvious over Salesky, Teng and Ohshima

1. Errors of Law and Fact in the Rejection

The Examiner has made the same errors as described previously with respect to the rejected Claims 1-3, 5, 10-13, 15-22, 24 and 26. In addition, the Examiner has failed to show a teaching or suggestion to modify Salesky in view of Teng and further in view of Ohshima. Hence, the Examiner has failed to establish a *prima facie* case of obviousness in view of the references of record. Id.

As indicated above, the Examiner fails to establish a suggestion or motivation to modify Salesky in view of Teng since such a modification would render Salesky unsatisfactory for its intended purpose of facilitating conferencing between geographically remote individuals. In fact, Salesky teaches away from the Examiners proposed modification since the modification would require presenters and attendees to occupy the same local geographic region to enable connect to the LAN, as taught by Teng.

Regarding the Examiner's citing of Ohshima, according to the Examiner:

> Ohshima on the other hand teaches a partial rewritten library (32) functioning in response to the partially rewritten line determination means (16). See col. 3, lines 26-31. (*See*, pg. 5, ¶8 of Final Office Action mailed July 19, 2004.)

Assuming, arguendo, that Ohshima discloses a partial rewritten library (32) functioning in response to the partially rewritten line determination means (16) for collection of data required by the system to authenticate users, Applicants respectfully submit that the Examiner's citing of Ohshima fails to rectify the deficiencies in the combination of Salesky in view of Teng.

In fact, Applicants submit that modification of Salesky in view of Teng and further in view of Ohshima, to incorporate the video server 12 and LAN segment 13, as taught by Teng, and partially rewritten line determination means (16), as taught by Oshima, within the computer conferencing system, as taught by Salesky, runs contrary to the explicit teachings of Salesky. One of ordinary skill in the art would not be motivated to modify Salesky in a manner explicitly contrary to Salesky's own teachings.

Accordingly, Applicants' claimed invention could only be arrived at through inappropriate hindsight. Therefore, Applicants respectfully submit that the Examiner fails to establish that it would be obvious to combine the missing elements provided by Teng and Ohshima with the teachings of Salesky. Grasselli, supra.

Consequently, Applicants respectfully submit that the combined teachings of Salesky in view of Teng and further in view of Ohshima, would not have suggested the claimed invention to one of ordinary skill in the art, as required to establish a *prima facie* case of obviousness. Rijckaert, supra. Hence, a *prima facie* case of obviousness has not been established and the rejection of Claims 2 and 18-19 is erroneous and should be overturned. Id.

D. Rejection of Claims 30-33 As Obvious over Salesky, Teng and Begun

1. Errors of Law and Fact in the Rejection

The Examiner has made the same errors as described previously with respect to the rejected Claims 1-3, 5, 10-13, 15-22, 24 and 26. In addition, the Examiner has failed to show a teaching or suggestion to modify Salesky in view of Teng and further in view of Begun. Hence, the Examiner has failed to establish a *prima facie* case of obviousness in view of the references of record.

As indicated above, modification of Salesky in view of Teng to incorporate the video server 12 and LAN segment 13, as taught by Teng, within the computer conferencing system, as taught by Salesky, would render Salesky unsatisfactory for its intended purpose of facilitating conferencing between geographically remote individuals. (*See*, Col. 1, lines 52-55.)

Regarding the Examiner's citing of Begun, according to the Examiner:

> Begun et al. on the other hand teaches a comparator being connected to the local address bus and to the first address buffer and being operative to compare the address buffer in the first address buffer with the address on the local bus in a second partial write cycle request and generating a MATCH signal when the two addresses being compared are the same. See Fig, 5 and col. 7, lines 23-40. (*See*, pg. 7, ¶3 of the Final Office Action mailed July 19, 2004.)

Assuming, arguendo, that Begun discloses a write combining of partial write cycles of data, Applicants respectfully submit that the Examiner's citing of Begun fails to rectify the deficiencies in the combination of Salesky in view of Teng.

In fact, Applicants submit that modification of Salesky in view of Teng and further in view of Begun, to incorporate the video server 12 and LAN segment 13, as taught by Teng, and partial write combining, as taught by Begun, within the computer conferencing system, as taught by Salesky, runs contrary to the explicit teachings of Salesky. One of ordinary skill in the art would not be motivated to modify Salesky in a manner explicitly contrary to Salesky's own teachings.

Accordingly, Applicants' claimed invention could only be arrived at through inappropriate hindsight. Therefore, Applicants respectfully submit that the Examiner fails to establish that it would be obvious to combine the missing elements provided by Teng and Begun with the teachings of Salesky. Grasselli, supra.

Consequently, Applicants respectfully submit that the combined teachings of Salesky in view of Teng and further in view of Begun, would not have suggested the claimed invention to one of ordinary skill in the art, as required to establish a *prima facie* case of obviousness. Rijckaert, supra. Hence, a *prima facie* case of obviousness has not been established and the rejection is erroneous and should be overturned. Id.

2. Specific Limitations Not Described in the Prior Art

Claims 30-33 recite analogous claim features. Claim 30 is representative. Claim 30 recites the following claim features, which is neither taught nor suggested by Salesky, Teng, Begun or the references of record:

> a video memory coupled to the interface, the interface to update the video memory if an address associated with an updated portion of video image data over the shared communication channel matches an address of the first display device; and
>
> a control circuit to refresh a displayed image in the first display from the first video memory. (emphasis added.)

3. Explanation Why Such Limitations Render the Claims Non-Obvious Over the Prior Art

The Examiner fails to illustrate that the combination or modification of Salesky in view of Teng and further in view of Begun teaches or suggests each of the recited features of the claimed invention as required to establish a *prima facie* case of obviousness. Royka, supra. Here, Claims 30-33 recite the update of a video memory if an address associated with an updated portion of video image data matches an address of a display device. Conversely, the teachings of Begun are specifically directed to write combining partial write requests directed to system memory. (See Begun, col. 3, lines 9-16.) Applicant respectfully submits that write combining of partial write requests to system memory provides no teachings or suggestions with regards to updating of video memory when an address associated with a received, updated portion of video image data matches an address of a display device, as recited by Claims 30-33.

In other words, claims 30-33 recite an address associated with the first display device which is distinct from the addresses used to refer to system memory as referred to in Begun. Accordingly, Applicant respectfully submits that the Examiner fails to establish a *prima facie* case of obviousness since teachings from the prior art references of Salesky in view of Teng and further in view of Begun fail to teach or suggest the claimed subject matter. Id. Therefore, Applicant respectfully submits that the Examiner fails to establish a *prima facie* case and the rejection is therefore improper and should be overturned. Id.

Furthermore, the Examiner is prohibited from establishing a suggestion or motivation for modifying or combining Salesky in view of Teng and further in view of Begun, to render the claimed invention obvious since Salesky specifically teaches away from the combination or modification of Salesky in view of Teng in view of Begun.

Specifically, modification of Salesky in view of Teng and further in view of Begun, to incorporate the video server 12 and LAN segment 13, as taught by Teng, and partial write combining, as taught by Begun, within the computer conferencing system, as taught by Salesky, would render Salesky unsatisfactory for its intended purpose of facilitating conferencing between geographically remote individuals. (*See*, Col. 1, lines 52-55.)

Accordingly, Applicants respectfully submit that the Examiner is prohibited from combining Salesky in view of Begun and further in view of Ohshima since Salesky teaches away from incorporation of the video server 12 and LAN segment 13, as taught by Teng, and partial write combining, as taught by Begun, within the computer conferencing system, as taught by Salesky. Grasselli, supra. Hence, Applicants respectfully submit that Applicants' claimed invention could only be arrived at through inappropriate hindsight.

Consequently, Applicants respectfully submit that the combined teachings of Salesky in view of Teng and further in view of Ohshima, would not have suggested the claimed invention to one of ordinary skill in the art, as required to establish a *prima facie* case of obviousness. Rijckaert, supra. Therefore, a *prima facie* case of obviousness of the claims is not established and the rejection of Claims 30-33 should be overturned. Id.

E. Rejection of Claims 34, 35, 37-39 and 41-43 As Obvious over Ohshima, Teng and Begun

1. Errors of Law and Fact in the Rejection

For the reasons provided below, the Examiner has failed to establish a *prima facie* case of obviousness in view of the references of record. Applicants respectfully submit that the combined teachings of Oshima in view of Teng and further in view of Begun would not have suggested the claimed invention to one of ordinary skill in the art, as required to establish a *prima facie* case of obviousness. Rijckaert, supra. Hence, a *prima facie* case of obviousness has not been established and the rejection is erroneous and should be overturned. Id.

As correctly pointed out by the Examiner:

> Ohshima does not teach the use of shared communication channel (*See*, pg. 7, ¶3 of the Final Office Action mailed July 19, 2004.)

As a result, the Examiner cites Teng, which according to the Examiner discloses:

> Teng teaches as shown in Fig. 1 , and mentioned above the use of a local area network (LAN) segment (13), which is a shared transmission medium (abstract)., See col. 5, lines 36-38. (*See*, pg. 7, ¶3 of the Final Office Action mailed July 19, 2004.)

According to the Examiner:

> Therefore, it would have been obvious to modify Ohshima's client-server system to adapt Teng's shared transmission medium (13). One would have been motivated in view of the suggestion in Teng that the shared transmission medium (13) equivalently meets the desired "shared communication channel". The use of shared transmission medium (13) helps function a client-server system as taught by Teng. (*See*, pg. 7, ¶4 of the Final Office Action mailed July 19, 2004.)

Applicant respectfully submits that the modification of Oshima in view of Teng, as proposed by the Examiner, would require Oshima alteration of the principle of operation of Oshima. As indicated by the Federal Circuit:

> If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. In re Ratti, 270 F.2d 810, 123, U.S.P.Q. 349 (C.C.P.A. 1959).

Here, Ohshima is directed to preventing the dispersion of an object on a screen when multiple interlacing is applied. (*See*, Ohshima, col. 1, lines 31-36.) Accordingly, Ohshima describes an object of the invention to provide specific means or structure to implement the foregoing partial writing method. (*See*, Ohshima, col. 2, lines 35-43.) As described within Ohshima:

> A partial rewriting method is provided, such that in shifting an object on a screen or producing it thereon, only the line where the screen representation changes is temporarily displayed by non-interlacing method. (col. 1, lines 44-47.) (Emphasis added.)

As further described within Ohshima:

> FIG. 2 is a view showing an example of the hardware structure to actually implement the partial rewritten line determination means 16 and scan line control means 17 shown in FIG. 1 by means of software. (col. 2, lines 56-59.)

As further described within Ohshima:

> Each means shown in FIG. 1 can be implemented in several forms as software executable and the hardware shown in FIG. 2. Here two modes are represented as shown in FIG. 3 and FIG. 4. (col. 3, lines 18-21.)

As illustrated with reference to FIG. 3:

> An Xclient 30 ... functions in response to application software 11 while an Xserver 31 issues image representation requests. The Xserver functions in response to the display driver means 12 to write image data into the frame buffer 13 using the functions of a graphic device driver 33. Likewise, a partial rewriting library 32 functions in response to the partially rewritten line determination means 16 and remote firmware 35, to scan the line control means 17. The partial rewriting library 32 contains information regarding the image representation area from the Xserver 31 to determine the line to which partial writing should be applied and transfer such information to the remote firmware 35 using the functions of graphic device driver 33. The remote firmware 35 specifies the scanning line for the display controller 36 on the basis of this information. The Xclient 30, Xserver 31, partial rewriting library 32, and graphic driver 33 are software executed by the central arithmetic processing unit 21 in FIG. 2. On the other hand, the remote firmware 35 is the software executed by the graphic controller 28. (col. 3, lines 21-43.) (emphasis added.)

Applicant respectfully submits that the Examiner has incorrectly characterized Ohshima as teaching a client server system. In fact, Applicant respectfully submits that the Examiner has made this incorrect characterization based on Xclient 30 and Xserver 31, as illustrated with FIGS. 3 and 4 of Ohshima. As described by Ohshima, the Xclient and Xserver are software executed by the central arithmetic processing unit 21 in FIG. 2. (*See*, col, 3, lines 38-43.)

Furthermore, as illustrated with reference to FIGS. 2-4 of Ohshima, Sbus 26 couples components of host system to graphics subsystem. As known to those skilled in the art, Sbus is an internal system expansion connector bus used in SPARC computer architectures. (*See,* Exhibit 2, which provides a definition of Sbus from Wikipedia.) Applicant respectfully submits that modification of Ohshima, in view of Teng, to teach the receipt of an updated portion of image data over a shared communications channel would require replacing Sbus 26, as taught by Ohshima, with, for example, LAN segment 13, as taught by Teng.

However, as is illustrated by the cited passages above, Sbus 26 and the teachings of Ohshima are directed to the internals of a computer system. Applicant respectfully submits that one skilled in the art would not replace the internal bus of a computer system with a LAN segment, as taught by Teng. Applicant respectfully submits that such a modification would alter the principal operation of Ohshima. Therefore, at least for these reasons, Applicant respectfully submits that there is no motivation or suggestion to combine the teachings of Ohshima in view of Teng and further in view of Begun. Id.

Furthermore, the teachings of Ohshima are incompatible with the teachings of Teng and thus, there is no suggestion or motivation to combine these references. The proper motivation or suggestion to combine is lacking since, in Ohshima, there is no need for replacement of the Sbus 26 taught by Ohshima with LAN segment 13, as taught by Teng.

As correctly pointed out by the Examiner:

> Ohshima does not teach "updating the memory of the display device if an address associated with the updated portion of the video image data matches a display device address". (*See*, pg. 8, ¶1 of the Final Office Action mailed July 19, 2004.)

As a result, the Examiner cites Begun. As indicated above, write combining, as taught by Begun, has virtually no relation to the updating of a video memory of a display device if an address associated with the updated portion of video image data matches a display devices address, as recited by Claims 34 and 39. Hence, Applicant respectfully submits that the references of Ohshima, Teng and Begun, as well as the skill in the art, would not provide a suggestion or motivation for combining the reference teachings, as required to establish a *prima facie* case of obviousness.

Therefore, Applicant respectfully submits that the Examiner fails to establish that it would be obvious to combine the missing elements provided by Teng and Begun with the teachings of Ohshima. Grasselli, supra. Consequently, Applicants respectfully submit that Applicants' claimed invention could only be arrived at through inappropriate hindsight.

Accordingly, Applicants respectfully submit that the combined teachings of Ohshima in view of Teng and further in view of Begun would not have suggested the claimed invention to one of ordinary skill in the art, as required to establish a *prima facie* case of obviousness. Rijckaert, supra. Hence, a *prima facie* case of obviousness has not been established and the rejection is erroneous and should be overturned. Id.

2. Specific Limitations Not Described in the Prior Art

Independent Claims 34 and 39 recite analogous claim features. Claim 39 is representative. Independent Claim 39 recites the following claim features, which is neither taught nor suggested by Ohshima, Teng, Begun or the references of record:

> a video memory;
>
> an interface coupled to the video memory, the interface to detect an updated portion of video image data received over a shared communication channel and to update the video memory if an address associated with the updated portion of video image data matches a display device address; and
>
> a control circuit to refresh a display image in the displayed device from the video memory. (emphasis added.)

3. Explanation Why Such Limitations Render the Claims Non-Obvious Over the Prior Art

The Examiner fails to illustrate that the combination or modification of Ohshima in view of Teng and further in view of Begun teaches or suggests each of the recited features of the claimed invention, as required to establish a *prima facie* case of obviousness. Royka, supra. Here, Claims 34 and 39 recite the update of a video memory if an address associated with an updated portion of video image data matches an address of a display device. The Examiner recognizes the failure of Ohshima in view of Teng to teach or suggest this feature. As a result the Examiner cites Begun.

The teachings of Begun are specifically directed to write combining partial write requests directed to system memory. (See Begun, col. 3, lines 9-16.) Applicant respectfully submits that write combining of partial write requests to system memory provides no teachings or suggestions with regards to updating of video memory when an address associated with a received, updated portion of video memory matches an address of a display device, as recited by Claims 34 and 39.

In other words, Claims 34 and 39 recite an address associated with a display device which is distinct from the addresses used to refer to system memory as referred to in Begun. Accordingly, Applicant respectfully submits that the Examiner fails to establish a *prima facie* case of obviousness since teachings from the prior art references of Salesky in view of Teng and further in view of Begun fail to teach or suggest the claimed subject matter. Id. Therefore, Applicant respectfully submits that the Examiner fails to establish a *prima facie* case and the rejection is therefore improper and should be overturned. Id.

Furthermore, the Claims 34 and 39 recite detection of an updated portion of video memory received over a shared communications medium. To teach or suggest this feature would require replacement of the Sbus, taught by Ohshima, with LAN segment 13, as taught by Teng. Applicants respectfully submit that Ohshima, as well as the skill in the art, teach away from replacement of Sbus 26 as taught by Teng, since such a modification would drastically alter the principle of operation of Ohshima.

Accordingly, Applicants respectfully submit that the Examiner is prohibited from combining Ohshima in view of Teng and further in view of Begun since Ohshima teaches away from replacement of Sbus 26, as taught by Ohshima, with LAN segment 13, as taught by Teng. Grasselli, supra.

In fact, Applicant submits that modification of Ohshima in view of Teng, runs contrary to the explicit teachings of Ohshima. One of ordinary skill in the art would not be motivated to modify Ohshima in a manner specifically contrary to Ohshima's own teachings. Accordingly, Applicants' claimed invention could only be arrived at through inappropriate hindsight. Id.

Consequently, Applicants respectfully submit that the combined teachings of Ohshima in view of Teng and further in view of Begun would not have suggested the claimed invention to one of ordinary skill in the art, as required to establish a *prima facie* case of obviousness. Rijckaert, supra. Therefore, a *prima facie* case of obviousness of the claims is not established and the rejection of Claims 34, 35, 37-39 and 41-43 should be overturned. Id.

F. Rejection of Claims 36 and 40 As Obvious over Ohshima, Teng, Begun and Salesky

1. Errors of Law and Fact in the Rejection

The Examiner has made the same errors as described previously with respect to the rejected Claims 34, 35, 37-39 and 41-43. In addition, the Examiner fails to show a teaching or suggestion to modify Ohshima in view of Teng in view of Begun and further in view of Salesky. Hence, the Examiner has failed to establish a *prima facie* case of obviousness in view of the references of record. Id.

As indicated above, the Examiner's proposed modification of Ohshima in view of Teng and further in view of Begun would replace the internal bus (Sbus 26) of the computer system taught by Ohshima with a LAN segment, as taught by Teng, and further modify the computer system taught by Ohshima to include write combining, as taught by Begun. Applicant respectfully submits that such a modification would drastically alter the principal operation of Ohshima. Hence, Oshima teaches away from the Examiners proposed modification.

Regarding the Examiner's citing of Salesky, Applicant respectfully submits that the Examiner's citing of Salesky fails to rectify the deficiencies in the combination of Ohshima in view of Teng and further in view of Begun.

Accordingly, Applicants' claimed invention could only be arrived at through inappropriate hindsight. Therefore, Applicants respectfully submit that the Examiner fails to establish that it would be obvious to combine the missing elements provided by Teng, Begun and Salesky with the teachings of Ohshima.

Consequently, Applicants respectfully submit that the combined teachings of Ohshima in view of Teng in view of Begun and further in view of Salesky, would not have suggested the claimed invention to one of ordinary skill in the art, as required to establish a *prima facie* case of obviousness. Id. Hence, a *prima facie* case of obviousness has not been established and the rejection is erroneous and should be overturned. Id.

2. Specific Limitations Not Described in the Prior Art

Claims 36 and 40 recite analogous claim features. Claim 40 is representative. Claim 40 recites the following claim feature, which is neither taught nor suggested by Ohshima, Teng, Begun, Salesky or the references of record:

> wherein the interface is to receive the display device address assigned to the display device during display device initialization. (emphasis added)

3. Explanation Why Such Limitations Render the Claims Non-Obvious Over the Prior Art

The Examiner fails to illustrate that the combination or modification of Oshima in view of Teng and further in view of Begun teaches or suggests each of the recited features of the claimed invention, as required to establish *prima facie* obviousness of a claimed invention. Royka, supra.

Here, Claims 36 and 40 recite the receipt of an address associated a display device during display device initialization. Conversely, the teachings of Begun are specifically directed to write combining partial write requests directed to system memory. (See Begun, col. 3, lines 9-16) Applicant respectfully submits that write combining of partial write requests to system memory taught by Begun provides no teachings or suggestions with receipt of an address associated with a display device, as recited by Claims 36 and 40.

In other words, claims 36 and 40 recite an address associated with the first display device which is distinct from the addresses used to refer to system memory as referred to in Begun. Accordingly, Applicant respectfully submits that the Examiner fails to establish a *prima facie* case of obviousness since teachings from the prior art references of Oshima in view of Teng in view of Begun and further in view of Salesky fail to teach or suggest the claimed subject matter. Id. Therefore, Applicant respectfully submits that the Examiner fails to establish a *prima facie* case and the rejection is therefore improper and should be overturned. Id.

Furthermore, the Examiner is prohibited from establishing a suggestion or motivation for modifying or combining Oshima in view of Teng in view of Begun and further in view of Salesky, to render the claimed invention obvious since Oshima specifically teaches away from the combination or modification of Oshima in view of Teng in view of Begun and further in view of Salesky. As indicated above, Ohshima, as well as the skill in the art, teach away from replacement of Sbus 26 as taught by Ohshima with the LAN segment as Teng, since such a modification would drastically alter the principle of operation of Ohshima.

Accordingly, Applicants respectfully submit that the Examiner is prohibited from combining Ohshima in view of Teng in view of Begun and further in view of Salesky since

Ohshima teaches away from replacement of Sbus 26, as taught by Ohshima, with LAN segment 13, as taught by Teng. Grasselli, supra.

In fact, Applicant submits that modification of Ohshima in view of Teng, runs contrary to the explicit teachings of Ohshima. One of ordinary skill in the art would not be motivated to modify Ohshima in a manner specifically contrary to Ohshima's own teachings. Accordingly, Applicants' claimed invention could only be arrived at through inappropriate hindsight.

Accordingly, Applicants respectfully submit that the combined teachings of Ohshima in view of Teng in view of Begun and further in view of Salesky would not have suggested the claimed invention to one of ordinary skill in the art, as required to establish a *prima facie* case of obviousness. Rijckaert, supra. Therefore, a *prima facie* case of obviousness of the claims is not established and the rejection of Claims 36 and 40 should be overturned. Id.

VIII. CONCLUSION AND RELIEF

Based on the foregoing, Applicant requests that the Board overturn the rejection of all pending claims and hold that all of the claims of the present application are allowable.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

Dated: December 29, 2004

By: ____________________
Joseph Lutz, Reg. No. 43,765

12400 Wilshire Boulevard
Seventh Floor
Los Angeles, California 90025
(310) 207-3800

CERTIFICATE OF MAILING:
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, with sufficient postage, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

12-29-04

Linda Black DATE

IX. APPENDIX

The claims involved in this Appeal are as follows:

1. (Previously Presented) A method, comprising:

identifying, by a video controller, a first updated portion of first video image data that has changed since a previous transmission to a first display device;

transmitting the first updated portion of the first video image data from the video controller to the first display device;

identifying, by the video controller, a second updated portion of second video image data that has changed since a previous transmission to a second display device; and

transmitting the second updated portion of second video image data from the video controller to the second display device,

wherein the first updated portion and the second updated portion are transmitted over a shared communication channel coupled between the video controller, the first display device and the second display device.

2. (Previously Presented) The method of claim 1, further comprising refreshing a first displayed image in the first display device from a first video memory of the first display device.

3. (Previously Presented) The method of claim 1, wherein transmitting the first updated portion is repeated at regular intervals.

4. (Cancelled)

5. (Previously Presented) The method of claim 2,

wherein updating the first video memory is repeated at irregular intervals; and

wherein said irregular intervals are based on detecting a change in the first video image data since the previous transmission to the first display device.

6-9. (Cancelled)

10. (Previously Presented) The method of claim 1, wherein the first portion and the second portion are formatted differently.

11. (Previously Presented) The method of claim 1, wherein the first portion and the second portion are formatted alike.

12. (Previously Presented) The method of claim 1, wherein the first portion includes an address to identify the first video device and the second portion includes an address to identify the second video device.

13. (Previously Presented) The method of claim 1, further comprising:
transmitting a third portion of the first video image data to the first display device;
time-stamping the first and third portions before transmission; and
synchronizing a presentation of the first and third portions based on the time-stamping.

14. (Cancelled)

15. (Previously Presented) The system of claim 22, wherein the first display device includes a protocol handler to interpret the first video data.

16. (Previously Presented) The system of claim 22, wherein the first display device includes a timing generator to generate timing signals for a display.

17. (Previously Presented) The system of claim 16, wherein the first display device includes a control circuit to configure the timing generator.

18. (Previously Presented) The system of claim 22, wherein the first display device includes a scalar circuit to change a granularity of video image.

19. (Previously Presented) The system of claim 18, wherein the first display device includes a control circuit to configure the scalar circuit.

20. (Previously Presented) The system of claim 22, wherein the first display device includes a display interface to at least one of a CRT and a flat panel.

21. (Previously Presented) The system of claim 22, wherein the first display device includes at least one of a CRT and a flat panel.

22. (Previously Presented) A system, comprising:
a shared communication channel;
a first display device coupled to the shared communication channel and having a first video memory contained within the first display device;
a second display device coupled to the shared communication channel and having a second video memory contained within the second display device; and

a video controller coupled to the shared communication channel to transmit an identified, first updated portion of first video image data that has changed since a previous transmission to the first display device over the shared communication channel to the first display device, and to transmit an identified, second updated portion of second video image data that has changed since a previous transmission to the second display device over the shared communication channel to the second display device.

23. (Cancelled)

24. (Previously Presented) The system of claim 22, wherein:

the first display device includes a first address decoder to decode a first device address associated with the first updated portion of first video image data received over the shared communication channel; and

the second display device includes a second address decoder to decode a second device address associated with the second updated portion of second image video data received over the shared communication channel.

25. (Cancelled)

26. (Previously Presented) The system of claim 24, further comprising a non-display device coupled to the shared communication channel to receive non-video data.

27. (Original) The system of claim 24, wherein the first and second address decoders each decode a broadcast address in a broadcast message to be processed by the first and second display devices.

28. (Previously Presented)The system of claim 22, wherein the shared communication channel comprises a bus.

29. (Previously Presented)The system of claim 22, wherein the shared communication channel comprises a daisy chain.

30. (Previously Presented)The system of claim 22, wherein the first display device comprises:

an interface coupled to the shared communication channel;

a video memory coupled to the interface, the interface to update the video memory if an address associated with an updated portion of video image data over the shared communication channel matches an address of the first display device; and a control circuit to refresh a displayed image in the first display from the first video memory.

31. (Previously Presented)The system of claim 22, wherein the second display device comprises:

an interface coupled to the shared communication channel;

a video memory coupled to the interface, the interface to update the video memory of the second display device if an address associated with an updated portion of video image data over the shared communication channel matches a display device address; and,

a control circuit to refresh a displayed image in the second display device from the video memory.

32. (Previously Presented)The method of claim 1, further comprising:

updating a video memory of the first display device if an address associated with an updated portion of video image data received over the shared communication channel matches a first display device address.

33. (Previously Presented)The method of claim 1, further comprising:

updating a video memory of the second display device if an address associated with an updated portion of video image data received over the shared communication channel matches a second display device address.

34. (Previously Presented)A method comprising:

detecting, by a display device, an updated portion of video image data received over a shared communication channel;

updating a video memory of the display device if an address associated with the updated portion of the video image data matches a display device address; and

refreshing a displayed image in the display device from the video memory.

35. (Previously Presented)The method of claim 34, wherein the updated portion of video image data represents video image data that has changed since a previous transmission to the display device and excludes a substantial portion of the video image data that is unchanged since the previous transmission to the display device.

36. (Previously Presented)The method of claim 34, wherein prior to detecting the updated portion of video image data, the method comprises:

receiving the display device address assigned to the display device during display device initialization.

37. (Previously Presented)The method of claim 34, wherein updating the video memory of the display device is repeated at regular intervals.

38. (Previously Presented)The method of claim 34, wherein updating the video memory of the display device is repeated at irregular intervals.

39. (Previously Presented)A display device comprising:

a video memory;

an interface coupled to the video memory, the interface to detect an updated portion of video image data received over a shared communication channel and to update the video memory if an address associated with the updated portion of video image data matches a display device address; and

a control circuit to refresh a display image in the displayed device from the video memory.

40. (Previously Presented)The display device of claim 39, wherein the interface is to receive the display device address assigned to the display device during display device initialization.

41. (Previously Presented)The display device of claim 39, wherein the display device includes one of a CRT and a flat panel.

42. (Previously Presented)The display device of claim 39, wherein the shared communication channel comprises one of a bus and a daisy chain.

43. (Previously Presented)The display device of claim 39, wherein the updated portion of video image data represents video image data that has changed since a previous transmission to the display device and excludes a substantial portion of the video image data that is unchanged since the previous transmission to the display device.